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# 12.7mm Dia. x 12.7mm FL, Uncoated, ISP Optics Barium Fluoride (BaF<sub>2</sub>) DCX Lens | BF-BX-12-12

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Stock #24-733 **CLEARANCE** 4 In Stock

- 1 + £408<sup>.00</sup>

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Qty 1-9	£408.00 each
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## Product Downloads

## General

Double-Convex Lens **Type:**

BF-BX-12-12 **Model Number:**

## Physical & Mechanical Properties

12.70 +0.00/-0.13      **Diameter (mm):**

<3      **Centering (arcmin):**

Protective as needed      **Bevel:**

5.80 ±0.20      **Center Thickness CT (mm):**

1.50      **Edge Thickness ET (mm):**

11.43      **Clear Aperture CA (mm):**

## Optical Properties

12.70 @5μm      **Effective Focal Length EFL (mm):**

Uncoated      **Coating:**

[Barium Fluoride \(BaF<sub>2</sub>\)](#)      **Substrate:**

60-40      **Surface Quality:**

λ      **Irregularity (P-V) @ 632.8nm:**

10.47      **Radius R<sub>1</sub> (mm):**

10.471      **Radius R<sub>2</sub> (mm):**

1.00      **f#:**

±2      **Focal Length Tolerance (%):**

0.50      **Numerical Aperture NA:**

200 - 12000      **Wavelength Range (nm):**

## Regulatory Compliance

[Compliant](#)      **RoHS 2015:**

[View](#)      **Certificate of Conformance:**

[Compliant](#)      **Reach 240:**

## Product Details

- Excellent Transmission from 0.2 - 12μm
- Provide High Transmission without AR Coatings
- Ideal for Infrared Spectroscopy and Infrared Imaging Applications

ISP Optics Barium Fluoride (BaF<sub>2</sub>) Double-Convex (DCX) Lenses are ideal for infrared spectroscopy and infrared imaging applications requiring high transmission from 0.2 – 12μm. Barium Fluoride features a low index of refraction, enabling excellent transmission from the Vacuum-UV (VUV) to the Long-Wave Infrared (LWIR) without the need for Anti-Reflection (AR) coatings. These lenses also provide higher resistance to high-energy radiation than Calcium Fluoride, even though they have similar physical properties. ISP Optics Barium Fluoride (BaF<sub>2</sub>) Double-Convex (DCX) Lenses can be used up to 800°C in a dry environment, but prolonged exposure to moisture can degrade transmission in the ultraviolet range.

**Note:** These lenses are very sensitive to thermal shock.

## Special Handling

These optics require special handling to avoid damage and ensure long-term performance. Proper handling, cleaning, and storage are essential to maintain optical quality. Explore our [Optics Cleaning Resources](#) for step-by-step guides and best practices. For personalized assistance, [Email us](#) or [Chat](#) with our technical support team.



Component Handling Tools

